

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 10/751,451
Source: IFND
Date Processed by STIC: 09-28-2005

ENTERED



IFWO

RAW SEQUENCE LISTING

DATE: 09/28/2005

PATENT APPLICATION: US/10/751,451

TIME: 07:58:08

Input Set : N:\Cr3\RULE60\10751451.raw.txt

Output Set: N:\CRF4\09282005\J751451.raw

```

1 <110> APPLICANT: Hoechst Marion Roussel
2 <120> TITLE OF INVENTION: Novel monomer protein with bone morphogenetic activity
3     and medicinal agent containing the same for preventing
4     and treating diseases of cartilage and bone.
5 <130> FILE REFERENCE: JH98K008 PCT SEQUENCES IN ENGLISH
6 <140> CURRENT APPLICATION NUMBER: US/10/751,451
7 <141> CURRENT FILING DATE: 2004-01-06
8 <150> PRIOR APPLICATION NUMBER: US/09/701,121
9 <151> PRIOR FILING DATE: 2000-11-20
10 <150> PRIOR APPLICATION NUMBER: 10-141379
11 <151> PRIOR FILING DATE: 1998-05-22
12 <160> NUMBER OF SEQ ID NOS: 4
13 <170> SOFTWARE: PatentIn Ver. 2.1
15 <210> SEQ ID NO: 1
16 <211> LENGTH: 357
17 <212> TYPE: DNA
18 <213> ORGANISM: HUMAN
19 <220> FEATURE:
20 <221> NAME/KEY: CDS
21 <222> LOCATION: (1)..(357)
22 <223> OTHER INFORMATION: Relevant amino acid residues in SEQ ID NO 1 from 1
23     to 82 and from 84 to 119 in WO 95/04819.
24     Note : aminoacid residue 83 is alanine
25     instead of cysteine.
26 <300> PUBLICATION INFORMATION:
27 <301> AUTHORS: HOTTEN, Gertrud
28     NEIDHARDT, Helge
29     PAULISTA, Michael
30 <302> TITLE: New growth/differentiation factor of the tgf-beta
31     familie.
32 <310> PATENT DOC NO: WO 95/04819
33 <311> PATENT FILING DATE: 1995-02-16
34 <400> SEQUENCE: 1
35     cca cta gca act cgt cag ggc aag cga ccc agc aag aac ctt aag gct      48
36     Pro Leu Ala Thr Arg Gln Gly Lys Arg Pro Ser Lys Asn Leu Lys Ala
37     1             5             10             15
38     cgc tgc agt cgg aag gca ctg cat gtc aac ttc aag gac atg ggc tgg      96
39     Arg Cys Ser Arg Lys Ala Leu His Val Asn Phe Lys Asp Met Gly Trp
40     20             25             30
41     gac gac tgg atc atc gca ccc ctt gag tac gag gct ttc cac tgc gag      144
42     Asp Asp Trp Ile Ile Ala Pro Leu Glu Tyr Glu Ala Phe His Cys Glu
43     35             40             45
44     ggg ctg tgc gag ttc cca ttg cgc tcc cac ctg gag ccc acg aat cat      192

```

RAW SEQUENCE LISTING

DATE: 09/28/2005

PATENT APPLICATION: US/10/751,451

TIME: 07:58:08

Input Set : N:\Crif3\RULE60\10751451.raw.txt

Output Set: N:\CRF4\09282005\J751451.raw

```

45      Gly Leu Cys Glu Phe Pro Leu Arg Ser His Leu Glu Pro Thr Asn His
46          50                      55                      60
47      gca gtc atc cag acc ctg atg aac tcc atg gac ccc gag tcc aca cca      240
48      Ala Val Ile Gln Thr Leu Met Asn Ser Met Asp Pro Glu Ser Thr Pro
49          65                      70                      75                      80
50      ccc acc gcc tgt gtg ccc acg cga ctg agt ccc atc agc atc ctc ttc      288
51      Pro Thr Ala Cys Val Pro Thr Arg Leu Ser Pro Ile Ser Ile Leu Phe
52          85                      90                      95
53      att gac tct gcc aac aac gtg gtg tat aag cag tat gag gac atg gtc      336
54      Ile Asp Ser Ala Asn Asn Val Val Tyr Lys Gln Tyr Glu Asp Met Val
55          100                      105                      110
56      gtg gag tcg tgt ggc tgt agg      357
57      Val Glu Ser Cys Gly Cys Arg
58          115
60 <210> SEQ ID NO: 2
61 <211> LENGTH: 119
62 <212> TYPE: PRT
63 <213> ORGANISM: HUMAN
64 <400> SEQUENCE: 2
65      Pro Leu Ala Thr Arg Gln Gly Lys Arg Pro Ser Lys Asn Leu Lys Ala
66          1                      5                      10                      15
67      Arg Cys Ser Arg Lys Ala Leu His Val Asn Phe Lys Asp Met Gly Trp
68          20                      25                      30
69      Asp Asp Trp Ile Ile Ala Pro Leu Glu Tyr Glu Ala Phe His Cys Glu
70          35                      40                      45
71      Gly Leu Cys Glu Phe Pro Leu Arg Ser His Leu Glu Pro Thr Asn His
72          50                      55                      60
73      Ala Val Ile Gln Thr Leu Met Asn Ser Met Asp Pro Glu Ser Thr Pro
74          65                      70                      75                      80
75      Pro Thr Ala Cys Val Pro Thr Arg Leu Ser Pro Ile Ser Ile Leu Phe
76          85                      90                      95
77      Ile Asp Ser Ala Asn Asn Val Val Tyr Lys Gln Tyr Glu Asp Met Val
78          100                      105                      110
79      Val Glu Ser Cys Gly Cys Arg
80          115
82 <210> SEQ ID NO: 3
83 <211> LENGTH: 39
84 <212> TYPE: DNA
85 <213> ORGANISM: HUMAN
86 <220> FEATURE:
87 <221> NAME/KEY: misc_feature
88 <222> LOCATION: (1)..(39)
89 <223> OTHER INFORMATION: Sense PCR primer for mutation introducing.
90 <400> SEQUENCE: 3
91      catgccatgg accccgagtc cacaccaccc accgcctgt      39
93 <210> SEQ ID NO: 4
94 <211> LENGTH: 37
95 <212> TYPE: DNA
96 <213> ORGANISM: HUMAN

```

RAW SEQUENCE LISTING

DATE: 09/28/2005

PATENT APPLICATION: US/10/751,451

TIME: 07:58:08

Input Set : N:\CrF3\RULE60\10751451.raw.txt

Output Set: N:\CRF4\09282005\J751451.raw

97 <220> FEATURE:

98 <221> NAME/KEY: misc_feature

99 <222> LOCATION: Complement((1)..(37))

100 <223> OTHER INFORMATION: Reverse PCR primer for mutation introducing.

101 <400> SEQUENCE: 4

102 cccaagcttg catgctgcc ggtcgactac ctacagc

37

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 09/28/2005
PATENT APPLICATION: US/10/751,451 TIME: 07:58:09

Input Set : N:\CrF3\RULE60\10751451.raw.txt
Output Set: N:\CRF4\09282005\J751451.raw

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 2

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/751,451

DATE: 09/28/2005

TIME: 07:58:09

Input Set : N:\Crf3\RULE60\10751451.raw.txt

Output Set: N:\CRF4\09282005\J751451.raw